The impact of 5G on the evolution of intelligent automation and industry digitization

Abstract

The mobile industry is developing and preparing to deploy the fifth-generation (5G) networks. The evolving 5G networks are becoming more readily available as a significant driver of the growth of IoT and other intelligent automation applications. 5G's lightning-fast connection and low-latency are needed for advances in intelligent automation—the Internet of Things (IoT), Artificial Intelligence (AI), driverless cars, digital reality, blockchain, and future breakthroughs we haven't even thought of yet. The advent of 5G is more than just a generational step; it opens a new world of possibilities for every tech industry. The purpose of this paper is to do a literature review and explore how 5G can enable or streamline intelligent automation in different industries. This paper reviews the evolution and development of various generations of mobile wireless technology underscores the importance of 5G revolutionary networks, reviews its key enabling technologies, examines its trends and challenges, explores its applications in different manufacturing industries, and highlights its role in shaping the age of unlimited connectivity, intelligent automation, and industry digitization.